

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/762,077	01/21/2004	Mervin G. Wood	11/2-22829/A/CGC 2141	4619
324	7590 01/05/2006		EXAM	INER
	ECIALTY CHEMICALS	KLEMANSKI	KLEMANSKI, HELENE G	
PATENT I	DEPARTMENT			
540 WHIT	E PLAINS RD		ART UNIT	PAPER NUMBER
P O BOX 2	.005		1755	
TARRYTO	WN, NY 10591-9005			

DATE MAILED: 01/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)			
Office Action Summary		10/762,077	WOOD ET AL.			
		Examiner	Art Unit			
	,	Helene Klemanski	1755			
	The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
WHIC - Exter after - If NO - Failu Any r	ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DATE in a solid part of the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. The period for reply is specified above, the maximum statutory period were to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONEI	N. nely filed the mailing date of this communication. D. (35 U.S.C. § 133).			
Status						
2a)⊠	Responsive to communication(s) filed on October This action is FINAL. 2b) This Since this application is in condition for allower closed in accordance with the practice under Expression 1.	action is non-final. nce except for formal matters, pro				
Dispositi	on of Claims					
 4) ☐ Claim(s) 1,2,4-12,19-24 and 26-37 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) ☐ Claim(s) 28-37 is/are allowed. 6) ☐ Claim(s) 1,2,20 and 22-27 is/are rejected. 7) ☐ Claim(s) 4-12,19 and 21 is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or election requirement. 						
Applicati	on Papers					
10)□	The specification is objected to by the Examine The drawing(s) filed on is/are: a) access applicant may not request that any objection to the Replacement drawing sheet(s) including the correction of the oath or declaration is objected to by the Ex	epted or b) objected to by the Eddrawing(s) be held in abeyance. See ion is required if the drawing(s) is obj	e 37 CFR 1.85(a). lected to. See 37 CFR 1.121(d).			
Priority ι	ınder 35 U.S.C. § 119					
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 						
Attachmen	t(s)					
2) 🔲 Notic 3) 🔲 Inforr	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) r No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:				

Application/Control Number: 10/762,077 Page 2

Art Unit: 1755

DETAILED ACTION

Response to Amendment

- 1. Claims 1, 2, 4-12, 19 and 21-24 have been amended, claims 3, 13-18 and 25 have been deleted and new claims 28-37 have been added. Hence, claims 1, 2, 4-12, 19-24 and 26-37 are pending in the application.
- 2. The 112, second paragraph rejection as set forth in the previous Office Action dated July 20, 2005 has been overcome by applicant's amendments and is now withdrawn.
- 3. The 102(b) rejections over Seltzer et al. (US 2002/0174964), Seltzer et al. (US 2002/0088574 and Seltzer et al. (US 6,599,326) as set forth in the previous Office Action dated July 20, 2005 have been overcome by applicant's amendments and are now withdrawn.
- 4. The 103(a) rejection over Suhadolnik et al. (US 4,972,009) as set forth in the previous Office Action dated July 20, 2005 has been overcome by applicant's amendments and is now withdrawn.
- 5. The 103(a) rejection over Suhadolnik et al. (US 4,972,009) in view of Ravichandran et al. (US 4,898,901) as set forth in the previous Office Action dated July 20, 2005 has been overcome by applicant's amendments and is now withdrawn.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Application/Control Number: 10/762,077 Page 3

Art Unit: 1755

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 1, 2, 20, 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Omatsu et al. (US 2003/0097959).

Omatsu et al. (US 2003/0097959) teach an aqueous ink jet recording ink composition comprising an azo dye and 2-200 parts by mass based on 100 parts by mass of the dye of a compound of the formula

wherein R¹⁰¹ and R¹⁰² are independently H, an aliphatic group or an aromatic group and R¹⁰³ is a hydroxy group or any pair of R¹⁰¹ and R¹⁰² may be coupled to form a 5- to 7-membered ring. The ink can further contain an antifading agent such as a benzotriazole. The ink is printed onto a recording paper or recording film such as those having as a support, chemical pulp or mechanical pulp to which conventionally known additives have been added. Preferably, paper or a plastic film having both sides laminated with a polyolefin (i.e. polyethylene) is used as the support. See paras. 0012-0015, paras. 0115-0119, compound (I-64), paras. 0127-0128, paras. 0175-0177, Table 15; Ink set 114, paras. 0203-0204 and claim 1. Omatsu et al. (US 2003/0097959) fails to specifically exemplify the use of a dialkyl hydroxylamine compound (i.e. compound I-64) as claimed by applicants.

Art Unit: 1755

Therefore, it would have been obvious to one having ordinary skill in the art to use the specific dialkyl hydroxylamine compound (i.e. compound I-64) as claimed by applicants as Omatsu et al. (US 2003/0097959) also discloses the use of these dialkyl hydroxylamine compounds but fails to show an example incorporating them.

8. Claims 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Omatsu et al. (US 2003/0097959) as applied to claims 1, 2, 20, 25 and 26 above, and further in view of Seltzer et al. ('326).

Omatsu et al. (US 2003/0097959) is cited and relied upon for the above stated reasons. Omatsu et al. (US 2003/0097959) fails to specifically teach the addition of the specific UV absorbers as claimed by applicants.

Seltzer et al. ('326) teach a similar composition having reduced loss of brightness and enhanced resistance to yellowing which comprises pulp or paper which still contains lignin, an N,N-dialkylhydroxylamine acid salt and UV absorbers such as benzotriazoles, s-triazines, benzophenones, α -cyanoacrylates, oxanilides, benzoxazinones, benzoates and α -alkyl cinnamates.

Therefore, it would have been obvious to one having ordinary skill in the art to have replaced the benzotriazole UV absorber of Omatsu et al. (US 2003/0097959) with the UV absorbers of Seltzer et al. ('326) because the substitution of art recognized equivalents as shown by Seltzer et al. ('326) would have been within the level of ordinary skill in the art.

Art Unit: 1755

9. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Omatsu et al. (US 2003/0097959) as applied to claims 1, 2, 20, 22-25 and 26 above, and further in view of Seltzer et al. ('326).

Omatsu et al. (US 2003/0097959) is cited and relied upon for the above stated reasons. Omatsu et al. (US 2003/0097959) fails to specifically teach a recording sheet coated with a composition containing the dialkyl hydroxylamine stabilizer as claimed by applicants.

Seltzer et al. ('326) teach a similar composition having reduced loss of brightness and enhanced resistance to yellowing which comprises pulp or paper which still contains lignin an N,N-dialkylhydroxylamine acid salt wherein the paper or pulp is chemimechanical or thermomechanical pulps or papers (i.e. recording mediums).

Therefore, it would have been obvious to one having ordinary skill in the art to have replaced the recording sheet of Omatsu et al. (US 2003/0097959) with the recording mediums of Seltzer et al. ('326) because the substitution of art recognized equivalents as shown by Seltzer et al. ('326) would have been within the level of ordinary skill in the art.

Response to Arguments

10. Applicant's arguments filed October 24, 2005 have been fully considered but they are not persuasive.

Applicants argued that the Omatsu et al. (US 2003/0097959) reference does not teach the dialkyl hydroxylamine compounds of the present claims. The examiner

Application/Control Number: 10/762,077 Page 6

Art Unit: 1755

disagrees since compound (I-64) is still encompassed by applicant's claims (i.e. when R_1 is a substituted alkyl with E_1COO as the substituent and E_1 is H and R_2 is the same as R_1). It is the examiners position that Omatsu et al's. compound (I-64) is a dicarboxypropyl hydroxylamine (of the formula R_1R_2N -OH) as claimed by applicants

Allowable Subject Matter

- 11. Claims 4-12, 19 and 21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 12. The following is a statement of reasons for the indication of allowable subject matter: None of the prior art of record teaches or fairly suggests an ink jet ink composition or an ink jet system containing a recording material and an ink jet ink composition comprising: (1) the specific dialkyl hydroxylamines as claimed by applicants in claims 4 and 5; (2) the specific nitrone stabilizers as claimed by applicants in claims 6-12 and (3) a mixture of dialkyl hydroxylamine and nitrone stabilizers as claimed by applicants in claim 19.
- 13. Claims 28-37 allowed.
- 14. The following is an examiner's statement of reasons for allowance: None of the prior art of record teaches or fairly suggests an ink jet recording material which is coated with at least one layer which is able to absorb ink and wherein the at least one layer comprises at least one compound selected from the group consisting of the dialkyl

Art Unit: 1755

hydroxylamine stabilizers of the formula as claimed by applicants and the nitrone stabilizers as claimed by applicants.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

15. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Helene Klemanski whose telephone number is (571) 272-1370. The examiner can normally be reached on Monday-Friday 5:30-2:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on (571) 272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free)

Helene Klemanski Primary Examiner Art Unit 1755

December 28, 2005